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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(43) International Publication Date:

3 February 2000 (03.02.00)

(21) International Application Number:

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A1

GB

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11 November 1998 (11.11.98)

(71) Applicant (for all designated States except US): DANISCO A/S [DK/DK]; Langebrogade 1, P.O. Box 17, DK-1001 Copenhagen K (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SØE, Jøm, Borch [DK/DK]; Orøvaenget 11, DK-8381 Mundelstrup (DK).

(74) Agents: HARDING, Charles, Thomas et al.; D. Young & Co., 21 New Fetter Lane, London EC4A 1DA (GB).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

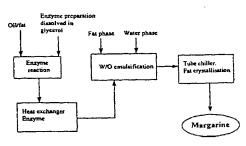
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

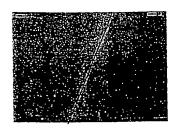
(54) Title: FOODSTUFF

(57) Abstract

There is provided use of a conversion agent to prepare from a food material a foodstuff comprising at least one functional ingredient, wherein the at least one functional ingredient has been generated from at least one constituent of the food material by the conversion agent.







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REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving office use only	
International Application No.	
International Filing Date	
Name of receiving Office and "PCT International Application"	

Applicant's or agent's file reference P005664WOCTH (if desired) (12 characters maximum) Box No. I TITLE OF INVENTION **FOODSTUFF** Box No. II **APPLICANT** Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below.) This person is also inventor. Telephone No. Danisco A/S Langebrogade 1 Facsimile No. PO Box 17 DK-1001 Copenhagen K Denmark Teleprinter No. State (i.e. country) of nationality: State (i.e. country) of residence: Denmark Denmark This person is applicant for all designated States except the the United States the States indicated in all designated the purposes of: United States of America States of America only the Supplemental Box Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name; for a legal entity, full official designation. The This person is: address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below.) applicant only SØE, Jørn Borch Oroaenget 11 applicant and inventor DK-8381 Mundelstrup Denmark inventor only (if this check-box is marked, do not fill in below) State (i.e. country) of nationality: State (i.e. country) of residence: Denmark Denmark This person is applicant for all designated States except the the United States the States indicated in all designated of America only the purposes of: the Supplemental Box States United States of America Further applicant and/or (further) inventors are indicated on a continuation sheet AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE Box No. IV The person identified below is hereby/has been appointed to act on behalf of ✓ agent common representative the applicant(s) before the competent International Authorities as: (Family name followed by given name; for a legal entity, full official designation. Name and address: Telephone No. The address must include postal code and name of country.) 023 8063 4816 HARDING, Charles Thomas Facsimile No. D Young & Co 023 8022 4262 21 New Fetter Lane London EC4A 1DA Teleprinter No. United Kingdom 477667 YOUNGS G Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box N	٧o.	٧	DESIGNATION OF STATES							
The fol	lowi	ng des	signations are hereby made under Rule 4.9(a) (mark ti	те ар	plicat	ole check-boxes; at least one must be marked):				
Regior	nal F	atent								
	\mathbf{Z}	AP	Zimbabwe, and any other State which is a Contractin	g St	ate o	tho, MW Malawi, SD Sudan, SZ Swaziland, UG Uganda, ZW f the Harare Protocol and of the PCT				
	V	EA	Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT							
	∑	EP	December 50 Coming 51 Circles of 50 Econoco GR Initia	od K	inada	erland and Liechtenstein,CY Cyprus, DE Germany, DK om, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC other State which is a Contracting State of the European Patent				
	∑	OA	Caban ON Cuinas ON Cuinas Bissou Mi Mali M	₽ M :	aunta	n Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA inia, NE Niger, SN Senegal, TD Chad, TG Togo, and any other te of the PCT (if other kind of protection or treatment desired, please				
Nation	al F	atent	(if other kind of protection or treatment desired, specify on do	otted	line):					
	ΔΙ	Alban	ia	V	LS	Lesotho				
		Arme	nia	V	LT	Lithuania				
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	BY	Belar	us	\mathbf{V}	MW	Malawi				
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		Ghar		V	TJ	Tajikistan				
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\$\overline{\sqrt{30}}	KP	Dem	ocratic People's Republic of Korea	C	heck	Zimbabwe -boxes reserved for designating States (for the purposes of a				
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			khetan			ice of this sheet:				
1 ==			ıkhstan	. П	AE	United Arab Emirates				
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Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

Supplemental Box

If the Supplemental Box is not used, this sheet need not be included in the request.

Use this box in the following cases:

1. If, in any of the Boxes, the space is insufficient to furnish all the information:

in particular:

- (i) if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available:
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- (iv) if, in addition to the agent(s) indicated in 3ox No. IV, there are further agents:
- (v) if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States f America is accompanied by an indication "Continuation" or "Continuation-in-part":
- (vi) if there are more than three earlier applications whose priority is claimed:
- 2. If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty:

in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient;

in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below:

in such case, write "Continuation of Box No. II" or "Continuation of Box No. II" or "Continuation of Boxes No. II and III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;

in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name. State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;

in such case, write "Continuation of Box No. IV and indicate for each further agent the same type of information as required in Box No. IV;

in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;

in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.

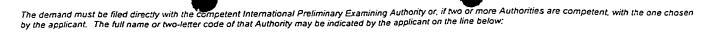
in such case, write "Statement Concerning Non-Prejudicial Disclosures or Exceptions to Lack of Novelty" and furnish that statement below.

CONTINUATION OF BOX IV - ADDITIONAL REPRESENTATIVES

PURVIS, William Michael Cameron COTTER, Ivan John PILCH, Adam Johyn Michael CRISP, David Norman ROBINSON, Nigel Alexander Julian HARRIS, Ian Richard TURNER, James Arthur MASCHIO, Antonio-MALLALIEU, Catherina Louise PRICE, Paul Anthony King PRATT, Richard Wilson HOLMES, Miles Keeton HORNER, David NACHSHEN, Neil POTTER, Julian Mark HAINES, Miles

PCT / IB 9 9 / 0 1 3 5 4

Box No. VI PRIORITY	CLAIM	Further p	riority claims are indicated	in the Supplemental Box
The priority of the following earlier	application(s) is hereby o	claimed:		
Filing Date	Number of	V	Vhere earlier application is	:
of earlier application (day/month/year)	earlier application	national application: country	regional application: * regional Office	international application: receiving Office
item (1) 44 (21 Jul 1998) 21 July 1998 (21/7/1998)	9815905.6	(bk) A GBAA		
item (2) [11 Nov 1998] ^A (11/11/1998)	9824758.8	(OK) A GBAA		
item (3)				
the earlier application(s) (online present international application	y if the earlier application vi ion is the receiving Office)) identified above as item(s):	for the purposes of the	
 Where the earlier application is an Althe Protection of Industrial Property for 	which that earlier application	was filed (Rule 4.10(b)(ii)). See Su	Box at least one country party polemental Box.	to the Paris Convention for
Box No. VII INTERNAT	ONAL SEARCHING			
Choice of International Searchir (If two or more International Searching competent to carry out the international Authority chosen; the two-letter code m	Authorities are search, indicate the Authorities are search, indicate the Authorities are search, indicate the search, indicate the search sea	quest to use results of earlier arch has been carried out by or thority): Date (day/month/year)	requested from the Interna	at search (if an earlier ational Searching untry (or regional Office):
	T; LANGUAGE OF	FILING		
		nal application is accompanied	by the item(s) marked belo	ow.
This international application conta following number of sheets:			by the nom(e) mames be.	•
request :	4 -	culation sheet		
description (excluding		ite signed power of attorney f general power of attorney; ref	ference number if any:	
sequence listing part)		ent explaining lack of signature		
claims : abstract :	1	documents(s) identified in Box		
drawings :		tion of international application		
sequence listing part of description	0 7. separa	te indications concerning depo	sited microorganism or otl	
l otal number of	8. nucleo	tide and/or amino acid sequeno specify): Letter	ce listing in computer read	lable form
Figure of the drawings which should accompany the abstract:		Language of filing of the nternational application:	English	
	OF APPLICANT O			
Next to each signature, indicate the name		he capacity in which the person sig	ns (if such capacity is not obv	ious from reading the request)
Osla				
HARDING, Charles Thomas				
Date of actual receipt of the printernational application:	ırported	r receiving Office use only	7 99	2. Drawings:
Corrected date of actual receiptimely received papers or draw the purported international appropriate the purported inter	ot due to later but vings completing		• • • • • • • • • • • • • • • • • • • •	received:
Date of timely receipt of the re corrections under PCT Article				not received:
International Searching Author specified by the applicant:	ity ISA/	6. 🄀 Transmit until sear	tal of search copy delayed rch fee paid	
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Date of receipt of the record copy the International Bureau:	by			



IPEA/ EPO

PCT

CHAPTER II

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For .	International Preliminary Examining Authority us	e.only ————————————————————————————————————				
lentification of IPEA	Date of receipt of DEMAND					
Box No. I IDENTIFICATION OF T	HE INTERNATIONAL APPLICATION	Applicant's or agent's file reference P005664WO CTH DAA				
nternational application No.	International filing date (day/month/year)	(Earliest) Priority date (day/month/year)				
PCT/IB99/01354	20 Jul 1999	21 Jul 1998				
Foodstuff	1					
Box No. II APPLICANT(S)						
Name and address: (Family name followed by The address must include	given name; for a legal entity, full official designation, postal code and name of country.)	Telephone No.:				
Danisco A/S Langebrogade 1 PO Box 17 DK-1001 Copenhagen K	·	Facsimile No.:				
Denmark		Teleprinter No.:				
State (that is, country) of nationality: Denm Name and address: (Family name followed by country.) SØE, Jørn Borch Oroaenget 1 l DK-8381 Mundelstrup Denmark	given name; for a legal entity, full official designation.	•				
State (that is, country) of nationality: Den	mark State (that is, country)	of residence: Denmark				
Name and address: (Family name followed by giv country.)	ren name; for a legal entity, full official designation. Th					
State (that is, country) of nationality:	State (that is, country)	of residence:				
Further applicants are indicated on a cor	ntinuation sheet.					

Sh	tool	No	2

International application No. PCT/IB99/01354

Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR	CORRESPONDENCE
The following person is agent common representative	
and $\sqrt{3}$ has been appointed earlier and represents the applicant(s) also for international	preliminary examination.
is hereby appointed and any earlier appointment of (an) agent(s)/common repres	
is hereby appointed, specifically for the procedure before the International Prelimagent(s)/common representative appointed earlier.	
Name and address: (Family name followed by given name; for a legal entity, full official designation.	Telephone No.:
The address must include postal code and name of country.) HARDING, Charles Thomas	023 8063 4816
D Young & Co	Facsimile No.:
21 New Fetter Lane London	023 8022 4262
EC4A 1DA United Kingdom	Teleprinter No.:
onied Kingdom	477667 YOUNGS G
Address for Correspondence: Mark this check-box where no agent or common space above is used instead to indicate a special address to which corresponder Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION	
Statement concerning amendments: *	
1. The applicant wishes the international preliminary examination to start on the basis of:	
the international application as originally filed	
the description as originally filed as amended under Article 34	
the claims as originally filed as amended under Article 19 (together with any accompanying as amended under Article 34	statement)
the drawings as originally filed as amended under Article 34	
2. The applicant wishes any amendment to the claims under Article 19 to be considered	d as reversed.
The applicant wishes the start of the international preliminary examination to be posenthe priority date unless the International Preliminary Examining Authority receives a or a notice from the applicant that he does not wish to make such amendments (Rule only where the time limit under Article 19 has not yet expired).	copy of any amendments made under Article 19
* Where no check-box is marked, international preliminary examination will start on the bas filed or, where a copy of amendments to the claims under Article 19 and/or amendments are received by the International Preliminary Examining Authority before it has begun to depreliminary examination report, as so amended.	of the international application under Article 34
Language for the purposes of international preliminary examination:	
which is the language in which the international application was filed. which is the language of a translation furnished for the purposes of international sea	rch
which is the language of publication of the international application.	
which is the language of translation (to be) furnished for the purposes of international	al preliminary examination.
Box No. V ELECTION OF STATES	
The applicant hereby elects all eligible States (that is, all States which have been designated	d and which are bound by Chapter II of
the PCT) excluding the following States which the applicant wishes not to elect:	
excluding the following States which the applicant wishes not to elect:	

Ch		NI-	2
50	eet	NO.	3

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International application No. PCT/IB99/01354

BOX NO. VI CHECK LIST			
The demand is accompanied by the following e referred to in Box No. IV, for the purposes of integration:		For In Exami	ternational Preliminary ning Authority use only
		received	not received
translation of international application	: sheets		
2. amendments under Article 34	: sheets		
copy (or, where required, translation) of amendments under Article 19	: sheets		
copy (or, where required, translation) of statement under Article 19	: sheets		
5. letter	: sheets		
6. other (specify)	: sheets		
The demand is also accompanied by the item(s) marked below:		
1. 1 fee calculation sheet		4. statement explaining	ng lack of signature
2. separate signed power of attorney			mino acid sequence listing in
3. Copy of general power of attorney; reference number, if any:		computer readable 6. other (specify): Le	etter
-		•	
C T HARDING			
For It	nternational Preliminary Ex	camining Authority use only	
Date of actual receipt of DEMAND:	<u> </u>		
2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):			
3. The date of receipt of the demand is A the priority date and item 4 or 5, below	AFTER the expiration of 19 v, does not apply.	months from The	e applicant has been ormed accordingly.
4. The date of receipt of the demand is V	VITHIN the period of 19 m	onths from the priority date as	extended by virtue of Rule 80.5.
5. Although the date of receipt of the der EXCUSED pursuant to Rule 82.	mand is after the expiration	of 19 months from the priority	date, the delay in arrival is
	For International E	Bureau use only	
Demand received from IPEA on:		-	

From the: INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY To: HARDING, C. D. YOUNG & CO. WRITTEN OPINION 21 New Fetter Lane London EC4A 1DA GRANDE BRETAGNE ON (PCT Rule 66) -8 MAY 3000 Date of mailing 04.05.2000 (day/month/year) within 3 month(s) REPLY DUE Applicant's or agent's file reference from the above date of mailing P005664WOCTH Priority date (day/month/year) International filing date (day/month/year) International application No. 21/07/1998 20/07/1999 PCT/IB99/01354 International Patent Classification (IPC) or both national classification and IPC C12P7/64 Applicant DANISCO A/S et al. 1. This written opinion is the first drawn up by this International Preliminary Examining Authority. This opinion contains indications relating to the following items: Basis of the opinion ١ Priority 11 Non-establishment of opinion with regard to novelty, inventive step and industrial applicability 111 Lack of unity of invention IV Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Certain document cited Certain defects in the international application \boxtimes VII Certain observations on the international application VIII The applicant is hereby invited to reply to this opinion. See the time limit indicated above. The applicant may, before the expiration of that time limit, When? request this Authority to grant an extension, see Rule 66.2(d). By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. How? For the form and the language of the amendments, see Rules 66.8 and 66.9. For an additional opportunity to submit amendments, see Rule 66.4. Also: For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6. If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 21/11/2000.

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Romano-Götsch, R

Formalities officer (incl. extension of time limits)

DA ROCHA, O.

Telephone No. +49 89 2399 8101



WRITTEN OPINION

I.	Basis	of	the	opinion
••	D4313	•	•••	

1.	This	nis opinion has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office response to an invitation under Article 14 are referred to in this opinion as "originally filed".):					
	Des	cription, pages:					
	1-34		as originally filed				
	Clai	ms, No.:					
	1-29	1	as originally filed				
	Drav	wings, sheets:	·				
	1/2-	2/2	as originally filed				
2.	The	amendments have	e resulted in the cancellation of:				
		the description,	pages:				
		the claims,	Nos.:				
		the drawings,	sheets:				
3	This con	s opinion has been sidered to go beyo	established as if (some of) the amendments had not been made, since they have been and the disclosure as filed (Rule 70.2(c)):				
4	. Add	litional observation	ns, if necessary:				
H	I. No	n-establishment o	of opinion with regard to novelty, inventive step and industrial applicability				
0	he qu r to b	uestions whether the e industrially applic	ne claimed invention appears to be novel, to involve an inventive step (to be non-obvious), cable have not been and will not be examined in respect of:				
		the entire interna	tional application,				
	Ø	claims Nos. 1-12	,25-29,				
t	ecau	se:	•				
		the said internati	onal application, or the said claims Nos. relate to the following subject matter which does ternational preliminary examination (<i>specify</i>):				

	the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
Ø	no international search report has been established for the said claims Nos. 1-12, 25-29.

- V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N) Claims 13-24 (no) (1-12,25-29 no?)
Inventive step (IS) Claims 13-24 (no) (1-12, 25-29 no?)

Industrial applicability (IA) Claims 13-24 (yes) (1-12, 25-29 yes?)

2. Citations and explanations see separate sheet

VI. Certain documents cited

- Certain published documents (Rule 70.10)
 and / or
- Non-written disclosures (Rule 70.9)see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

- As already highlighted by the ISA, a complete preliminary opinion in respect to 111. novelty, inventive step and industrial applicability relative to the claimed matter 1-12, and 25-29 cannot be expressed by the IPEA in view of the fact that said claimed matter has not been searched (Rule 66.1(e) PCT).
- The following documents are referred to: V.

D1: US-A-5 695 802

D2: EP-A-0 652 289

D3: EP-A-0 445 692

D4: WO-A-91 06661

D5: EP-A-0 191 217

D6: EP-A-0 882 797

- The following documents seem to anticipate the novelty of claims 1-29 on file (Art. i. 33(2) PCT):
- D1-D3 disclose the enzymatic hydrolysis (via lipase strain) of vegetable or animal fat and the food products in which the fat obtained by said process is incorporated (see (see D1: columns 3-4 and Examples; D2: columns 2-4, claims 1,8-11; D3: p.2 lines 28-30 and claim 1). Thus, D1-D3 anticipate the novelty of claims 1-29.
- D4-D5 disclose a mixture of oil and mono- and diglycerides obtained by enzymatic hydrolysis or esterification (see D4 p. 2-3, D5 p.1-7). The enzyme is removed prior separation of the fatty acid by-products from the reaction mixture (see D4 p.2, lines 28-29; D5 p.7, lines 9-11). Thus, D4-D5 anticipate the novelty of claims 1-3, 5-9, 11-23, 25-29.
- Since the enzymatic hydrolysis of fat claimed in claims 1-29 does not appear to ii. provide any unexpected advantage over D1-D5, the claimed matter 1-29 does not appear to involve an inventive step (Art. 33(3) PCT. The applicant is invited to introduce any argumentation or evidence in support of an inventive step.
- VI. Document D6, published on 9.12.98 claiming a priority date of 4.06.97, discloses an enzymatic preparation process for triglycerides that appears to fall into the scope of claims 1-29 on file. At present, an investigation as to the right of priority of the present application has not been carried out.

VII.VIII.

The expressions conversion agent, functional ingredient, foodstuff and food material i.

WRITTEN OPINION SEPARATE SHEET

used throughout the description and the claims are obscure (Art. 6 PCT) and render the scope of the claims unclear. For example, there appears to be no distinction between foodstuff and food material. The basis in the description for any amendment should be indicated in the applicant's letter.

- ii. Claims 4-26 claim an *Invention*. Claims 4-26 are dependent on claims 1-3, which are, respectively, a use, a process and a product (foodstuff) type of claim. Apparently, the applicant attempts to group the three types of claim under the word *invention*. However, the term *invention* is obscure and leads to doubts as to the matter for which protection is sought (Art. 6 PCT).
- iii. In claims 27-29, the expression as hereinbefore described is regarded as a reference to the description, which is allowable only when absolutely necessary (Rule 6.2 a) PCT), which does not seem to be the present case.
- iv. In claim 7, 11, 19, 20, the 'invention' is performed with *derivatives* of the enzymes (in claim 7) or compounds therein listed.

 Similarly, in claim 9, the *mutants* of the micro-organisms therein listed are claimed to be effective in the performance of the invention. The term *derivatives* or *mutants* are open-ended formulations that leave open to interpretation what type of compound/enzyme/micro-organism, respectively, can be employed to perform the invention. In the present application, however, only the use of the compounds/enzymes/micro-organisms explicitly listed are disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art as required by Art.5 PCT.
- v. The Applicant is invited to clarify the difference between the claimed matter 13 (...generated from at least two constituents..) and 14 (...generated from a first constituent and a second constituent..).
- vi. In claim 15, which indirectly depends on claim 1, the first and second constituents are claimed to be *constituents of the foodstuff*. In claim 1 the constituent is claimed to be constituent of the food material. The applicant is invited to clarify.
- vii. According to claim 25, ...at least one functional ingredient comprises an emulsifier. Applicant's attention is directed to the fact the term 'comprise' seems not fully correct since one ingredient can only be one compound. The applicant is invited to replace

WRITTEN OPINION SEPARATE SHEET

International application No. PCT/IB99/01354

the term 'comprise' with the term 'is' as supported by the description p. 15, line 16.

- viii. When amending the claims, the applicant is invited to simultaneously bring the description into conformity with the claims.
- To meet the requirements of Rule 5.1(a)ii PCT, the documents D1-D5 should be ix. identified in the description and the relevant background art disclosed therein should be briefly discussed.



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